

Claims:

1. An absorbent polymer based on optionally partially neutralized, monoethylenically unsaturated monomers bearing acid groups, the surface of which polymer has been subjected to secondary crosslinking subsequent to polymerizing, characterized in that the polymer has cyclodextrins and/or cyclodextrin derivatives bound covalently and/or ionically and/or incorporated therein.
2. The polymer according to claim 1, characterized in that the polymer includes from 0.01 to 50 wt.-%, preferably from 0.1 to 30 wt.-%, more preferably from 0.5 to 10 wt.-% of cyclodextrins and/or cyclodextrin derivatives, relative to the polymer.
3. The polymer according to claim 1 or 2, characterized in that a maximum of 85 wt.-% of the amount of cyclodextrins and/or cyclodextrin derivatives in the polymer is extractable.
4. The polymer according to claim 3, characterized in that the extractable amount is 60 wt.-% at maximum, preferably 45% at maximum.
5. The polymer according to any of claims 1 to 4, characterized in that the polymer is constituted up to 40 wt.-% of monoethylenically unsaturated monomers other than the monomers bearing acid groups.
6. The polymer according to any of claims 1 to 5, characterized in that the polymer has from 0.05 to 3 wt.-% of a crosslinking monomer incorporated by polymerization.

7. The polymer according to any of claims 1 to 7, characterized in that the polymer has 30 wt.-% of a water-soluble, natural or synthetic polymer incorporated therein by polymerization and/or graft polymerization.
8. The polymer according to any of claims 1 to 7, characterized in that the polymer has been subjected to surface crosslinking using from 0.1 to 10 wt.-%, relative to the polymer, of a crosslinker component.
9. The polymer according to any of claims 1 to 8, characterized in that the polymer contains α -, β -, or γ -cyclodextrins or derivatives thereof as cyclodextrins or derivatives thereof.
10. The polymer according to any of claims 1 to 9, characterized in that the cyclodextrins or cyclodextrin derivatives are covalently bound to the polymer via ethylenically unsaturated groups.
11. The polymer according to any of claims 1 to 9, characterized in that the cyclodextrins or cyclodextrin derivatives are ionically bound to the polymer via carboxylate, sulfate, sulfonate, or quaternary amino groups.
12. The polymer according to claim 11, characterized in that the cyclodextrins or cyclodextrin derivatives are bound to the polymer in a cationic fashion.
13. A process for producing the polymers according to any of claims 1 to 12 by free-radical polymerization of an aqueous solution of the ethylenically unsaturated, optionally partially neutralized monomer bearing acid groups, optionally up to 40 wt.-% of further monoethylenically unsaturated comonomers, crosslinking monomers, and optionally up to 30 wt.-% of a water-soluble natural or synthetic polymer, optional isolation, crushing, and

drying of the polymer, characterized in that the cyclodextrin and/or cyclodextrin derivative is already contained in the polymer during secondary surface crosslinking of same, or the polymer having undergone surface crosslinking is treated with an ionic cyclodextrin derivative.

14. The process according to claim 13, characterized in that the cyclodextrin and/or cyclodextrin derivative is incorporated prior to or during polymerization of the monomers and/or applied on an optionally obtained hydrogel and/or on optionally milled and dried polymer prior to or during surface crosslinking of the polymer.
15. The process according to any of claims 13 to 14, characterized in that the cyclodextrin or cyclodextrin derivative is employed as substance or as a solution.
16. Use of the polymers according to any of claims 1 to 12 as an absorbent for aqueous liquids, preferably in absorbing body fluids, in optionally foamed sheet materials, in packaging materials, in plant breeding, and as soil improver.
17. The use of polymers according to claim 16 in hygiene articles.
18. Use of the polymers according to any of claims 1 to 12 as a vehicle and/or stabilizer for active substances or fertilizers being released optionally in a delayed fashion.